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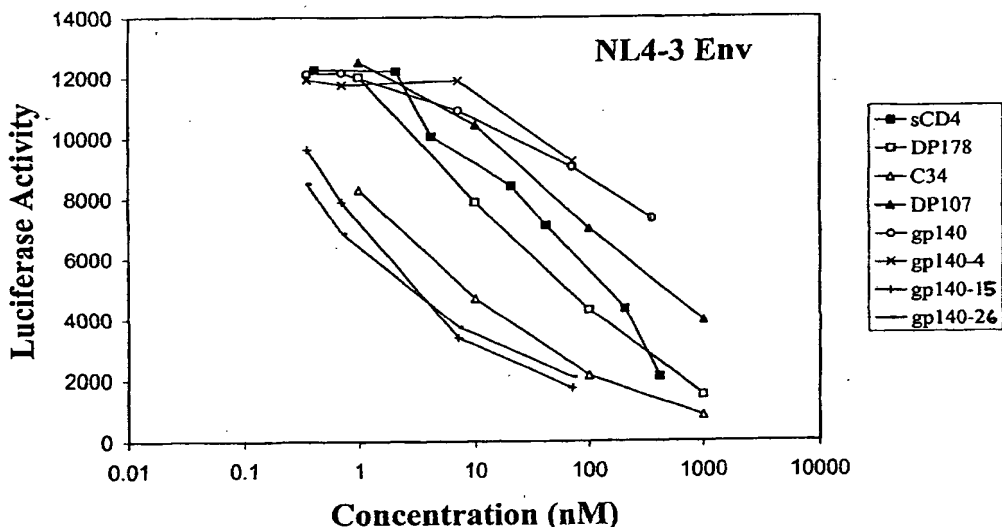
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(54) Title: HIV-1 ENVELOPE GLYCOPROTEINS STABILIZED BY FLEXIBLE LINKERS AS POTENT ENTRY INHIBITORS AND IMMUNOGENS



(57) Abstract: This invention relates generally to immune responses to human immunodeficiency virus coat protein gp160 presented in the form of antigenic compositions, nucleic acids encoding human immunodeficiency virus coat proteins, and vaccines. The invention also relates to methods for production of antigenic compositions containing human immunodeficiency virus coat protein, nucleic acids encoding human immunodeficiency virus coat proteins, and human immunodeficiency virus vaccines. The invention comprises gp120 and gp41 subunits of the human immunodeficiency virus coat protein covalently linked through a peptide linker, as well as additional complexes including those comprising the human immunodeficiency virus coat protein and its natural cellular receptor molecules.